



Webinar Talk on “Managing Critical Asset : How Digital Twins Empower Engineers to Mitigate Risk, Drive Performance, and Deliver Sustainability”

Date : 23rd JULY 2026
Time : 3.00pm - 5.00pm
Platform : Zoom Platform
Speaker : Ir Isrin Ismail

BEM Approved CPD/PDP Hours: 2 Ref. No.: IEM26/HQ/264/T(w)

Registration Fees:

- Student Member : FOC
- IEM Member : RM 15.00
- Non-Member : RM 70.00

SYNOPSIS

According to Markets & Markets, the Asia Pacific digital twin market is projected to reach USD 4.57 billion in 2025 and USD 32.57 billion in 2030, growing at a CAGR of 48.1% from 2025 to 2030.

ISO 23247 defines a digital twin as "a fit-for-purpose digital representation of an observable manufacturing element with synchronization between the element and its digital representation."

Historically rooted in NASA's Apollo program in the 1960s — where physical replicas of spacecraft were used to simulate and solve mission-critical problems — digital twins were formally defined and adopted in the early 2000s, initially focused on manufacturing. Today, use cases span almost every sector — aerospace, energy, oil & gas, healthcare, railway, personal medicine, and urban planning — across all stages of the physical asset lifecycle, especially operation and maintenance.

Critical assets such as power plants, hospitals, and bridges carry significant operational, safety, and financial risks. Unplanned downtime, equipment failures, and compliance breaches are no longer acceptable in today's high-stakes environment. Digital twins play a pivotal role in identifying, managing, and eliminating these risks before they escalate — shifting engineering leaders from a reactive posture to a truly resilient one.

This digital transformation movement is fundamentally about boosting engineering performance — from profit-linked to sustainability-linked outcomes. Key technologies include real-time IoT, data analytics, advanced 3D modelling, and off course, the rapidly growing power of artificial intelligence (AI).

During this talk, the speaker will focus on engineering performance motivation rather than technology itself, supported by selected case studies from both local and overseas perspectives.

Speaker : Ir Isrin Ismail



Ir Isrin Ismail With almost 20 years at the forefront of engineering and digital transformation, he has been instrumental in delivering engineering projects up to RM 40 billion in value. From major highways and high-rise buildings to hospitals, oil & gas plants, renewable energy facilities, and entire city developments, his experience spans the full spectrum of critical asset management — giving him rare, real-world authority on why and how digital twins are transforming the future of engineering